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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO.       |
|---|-------------|----------------------|-------------------------|------------------------|
| 10/735,535  | 12/12/2003  | Johan Rune           | P18100US2               | 2685                   |
| 27045   | 7590        | 05/28/2008           |                         |                        |
| ERICSSON INC.<br>6300 LEGACY DRIVE<br>M/S EVR 1-C-11<br>PLANO, TX 75024 |             |                      | EXAMINER<br>JOO, JOSHUA |                        |
|   |             |                      | ART UNIT<br>2154        | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>05/28/2008 | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/735,535

**Applicant(s)**

RUNE ET AL.

**Examiner**

JOSHUA JOO

**Art Unit**

2154

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 35-37 and 40 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 7-34, 38, 39 and 41-68 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 5/3/04, 10/18/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Detailed Action***

1. Claims 1-68 are presented for examination.

**Information Disclosure Statement**

2. The information disclosure statement (IDS) submitted 05/03/2004 and 10/18/2004 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

**Drawings**

3. The replacement drawings dated 03/01/2005 are objected to because each replacement sheet is not labeled in the top margin as "Replacement Sheet". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

**Allowable Subject Matter**

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4. Claims 4-5, 7-34, 38-39, 41-68 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Claim Rejections - 35 USC § 103**

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson et al. US Publication #2002/0022483, in view of Funato et al. US Publication #2003/0087646 (Funato hereinafter).

7. As per claims 1 and 35, Thompson teaches substantially the invention as claimed including a method and system of managing nodes in a point-to-point network, said point-to-point network connected to a shared medium network by at least one network access point, comprising:

forming an administrative domain based on said point-to-point network and said shared medium network (Paragraph 0074. Access point for Bluetooth. Paragraph 0075. Wireless network coupled wired such as Ethernet. Paragraph 0086. Network may be managed by MIB.);

defining a network access point service area (NAPSA) for said network access point (Paragraph 0040; 0094. Access point and nodes within broadcast.); and

broadcasting a beacon message from said network access point at regular intervals throughout said NAPSA to provide said nodes with information about said network access point (Paragraph 0032; 0115. Access points broadcast SIDs that access point supports to nodes.).

8. Thompson does not specifically teach of including any changes in a route from said nodes to said network access point.

9. Funato teaches of broadcasting message including any changes in a route from said nodes to said network access point (Paragraph 0103. Periodically broadcast updates of mapped associations of link layer ID and network layer address. Paragraph 0037. Access router is identified by a layer address.).

10. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the broadcast to include any changes in a route from said nodes to said network access point. The motivation for the suggested combination is that Funato's teachings would improve Thompson's system by allowing nodes to remain synchronized with access points and provide updated information to allow nodes to connect to access points.

11. Claims 2 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson and Funato, in view of Sherman, US Patent #7,289,529 (Sherman hereinafter).

12. As per claims 2 and 36, Thompson teaches the method according to claim 1, wherein said network access point is an administrative domain attachment point (ADAP) through which said nodes of said point-to-point network are connected to said shared medium network (Paragraph 0074. Nodes communicate with access points. Paragraph 0075. Access points are coupled to network 130.), further comprising identifying said ADAP by a MAC address of said network access point such that ADAPs that are connected to the same shared medium network have different MAC addresses (Paragraph 0098. Unique MAC Id for each of the access point.), and all nodes with the same ADAP are members of the same NAPS (Paragraph 0040; 0094. Nodes within broadcast of an access point and connected to the access port are considered as members.). Thompson does not specifically teach of identifying said

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administrative domain by a unique administrative domain identification (ADI), and ADAPs having the same ADI, and all nodes with the same ADI are members of the same NAPSA.

13. Sherman teaches of a domain identified by a domain ID, wherein the domain ID identifies access points and mobile stations in the same WLAN network (Paragraph 0039).

14. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings to identify the administrative domain as taught by Thompson with a domain ID, for the access points to have same domain ID and all nodes with the same ADI be members of the same NAPSA. The motivation for the suggested combination is that Funato's teachings would improve the suggested system by enabling nodes to only interpret beacons coming from the administrative domain.

15. Claims 3, 6, 37, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson, Funato, and Sherman, in view of Beach et al. US Publication #2004/0165550 (Beach hereinafter).

16. As per claims 3 and 37, Thompson teaches the invention according to claims 2 and 36, further comprising defining broadcast types, including: a first broadcast type covering a single NAPSA (Paragraph 0040; 0094. Access point and nodes within broadcast.). Thompson does not specifically teach of a second broadcast type covering a single point-to-point network, a third broadcast type covering a single administrative domain, and a fourth broadcast type covering a single point-to-point network and a single administrative domain.

17. Beach teaches of transmitting certain types of broadcasts in a network comprising of a wired Ethernet network connected to access points (Paragraph 0032)

18. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings to transmit different types of broadcasts such that broadcast types include a

second broadcast type covering a single point-to-point network, a third broadcast type covering a single administrative domain, and a fourth broadcast type covering a single point-to-point network and a single administrative domain. The motivation for the suggested combination is that Beach's teachings of certain types of broadcasts would improve the suggested system by allowing network entities to communicate each other while allowing blocking of certain types of broadcasts that are not required by nodes as suggested by Beach, which would reduce network traffic.

19. As per claims 6 and 40, Thompson teaches the invention according to claims 3 and 37, wherein said ADAP is configured to broadcast a beacon message throughout said NAPSA at regular intervals to provide said nodes with information about said ADAP (Paragraph 0032; 0115. Access points periodically broadcast SIDs that access point supports to nodes.). Thompson does not specifically teach of including any changes in a route from said nodes to said ADAP.

20. Funato teaches of broadcasting message including any changes in a route from said nodes to said network access point (Paragraph 0103. Periodically broadcast updates of mapped associations of link layer ID and network layer address. Paragraph 0037. Access router is identified by a layer address.).

21. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings to include any changes in a route from said nodes to said ADAP. The motivation for the suggested combination is that Funato's teachings would improve Thompson's system by allowing nodes to remain synchronized with access points and providing updated information to allow nodes to connect to access points.

### **Conclusion**

22. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

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23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Joo whose telephone number is 571 272-3966. The examiner can normally be reached on Monday to Thursday 8AM to 5PM and every other Friday.

24. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

25. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/J. J./

Examiner, Art Unit 2154

/Nathan J. Flynn/

Supervisory Patent Examiner, Art Unit 2154